NON SHEET TWO	
LOT NO	STREET ADDRESS
46	6208 DEVON DRIVE
47	6212 " "
48	6205 " "
49	6201 " "
50	6125 WOODED RUN DRIVE
51	6129
52	6135 " "
53	6139 " "
54	6145 " "
55	6105 SHADED LEAF COURT
56	6109 " "
57	6113 " "
58	6117 " "
59	6120 " "
60	6116 " "
61	6112 " "
62	6108 " "
63	6104 " "
64	6161 WOODED RUN DRIVE

GENERAL NOTES

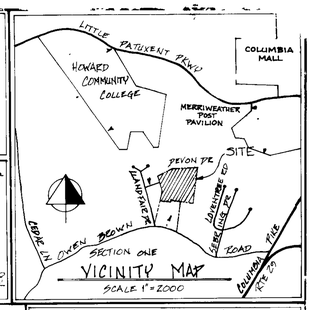
1 ZONING = R-20
2 TOTAL AREA = 13.1459 AC
3 AREA OF LOTS = 38 LOTS = 12.9278 Ac
4 AREA OF ROADS = 0 Ac
5 AREA OF OPEN SPACE
  a) NO 100 YEAR FLOOD PLAIN
  b) NET OPEN SPACE PROVIDED = 2.2181 Ac
  c) OPEN SPACE HAS BEEN MET IN OVERALL SUBDIVISION
6 PROPERTY ON TAX MAP 36, PARCEL 113
7 PROPERTY ON SOILS MAP #24 PREDOMINANT SOILS
  BkB2, BrC2, GlA, GlB2
8 MAX GRADE SLOPE 2:1
9 MIN GRADE SLOPE 2%
10 SEE SHEET 3 & 4 OF 5 FOR SEDIMENT CONTROL
11 TOTAL DISTURBED AREA = 8.63 AC
12 BASED ON BOUNDARY & TOPOGRAPHIC SURVEY BY DEVELOPMENT CONSULTANTS GROUP, INC, DATED 12/1983.
13 BENCHMARKS BM "A" NAIL IN UTILITY POLE #48720, ELEV 399.59
  BM "B" + CUT IN RIM OF SEWER MANHOLE ELEV 399.53
14 SEE VP 84-139 & VP 85-59, S-84-22, P-84-33, & F-86-204
15 LEGEND EXISTING CONTOURS 404
  PROPOSED CONTOURS 404
  PROPOSED LIMIT OF CLEARING & GRADING (WOODS TO REMAIN)
16 NUMBER OF UNITS ON THIS PLAN 38
17 THE CONTRACTOR OR DEVELOPER SHALL CONTACT THE CONSTRUCTION INSPECTOR, DIVISION 24 HRS IN ADVANCE OF COMMENCEMENT OF WORK AT 992-2650
18 PARKING SPACES SHALL BE PROVIDED IN EACH GARAGE
19 ALL ROADS SHOWN ARE PUBLIC ROADS
20 PROPOSED TREE LOCATIONS MAY BE FOUND ON DRAWINGS F-86-204

I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE MUST PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION.

_____ DATE

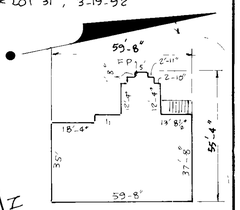
*I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS DEEMED NECESSARY.

_____ DATE 7-27-87

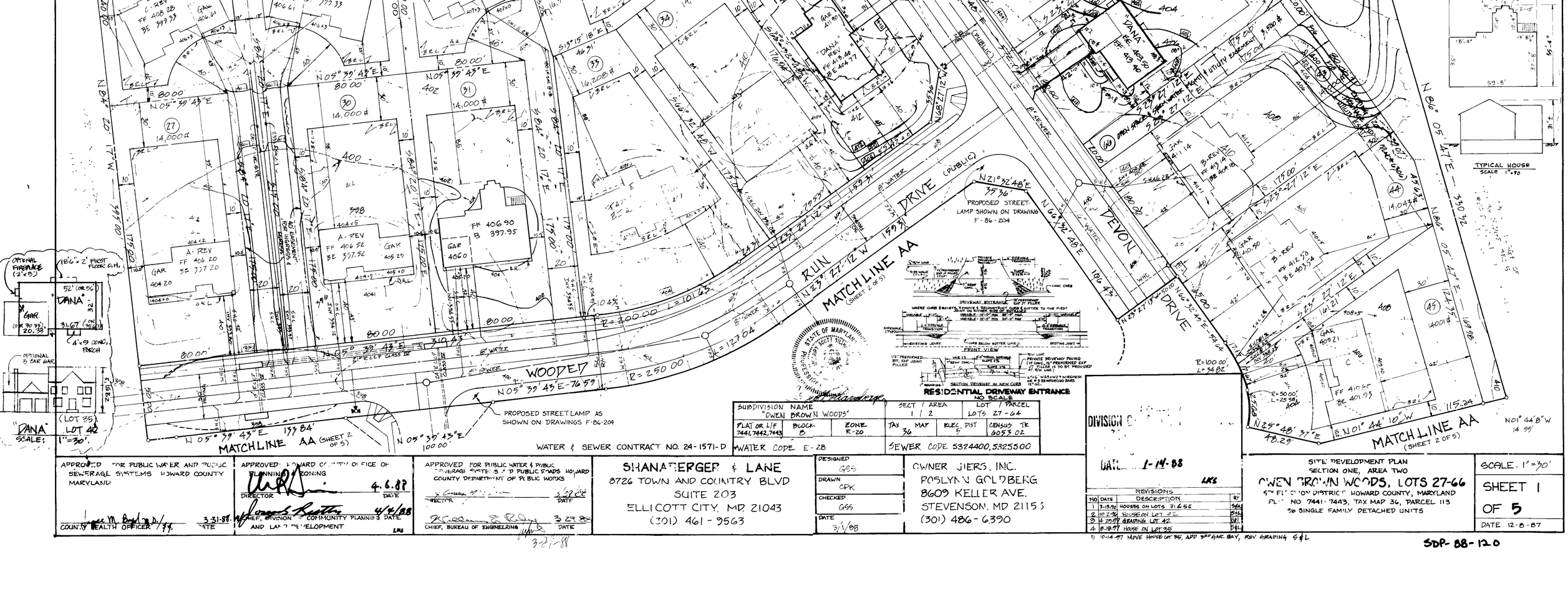


LOT LOCATION SHEET ONE	
LOT NO	STREET ADDRESS
27	6152 WOODED RUN DRIVE
28	6148 " "
29	6144 " "
30	6140 " "
31	6136 " "
32	6132 " "
33	6128 " "
34	6124 " "
35	6120 " "
36	6179 DEVON DRIVE
37	6175 " "
38	6176 " "
39	6180 " "
40	6184 " "
41	6188 " "
42	6192 " "
43	6196 " "
44	6200 " "
45	6204 " "

NOTE
REVISED BY SEDGHI & ASSOC FOR LOT 31, 3-19-92



TYPICAL HOUSE
SCALE 1" = 10'



RESIDENTIAL DRIVEWAY ENTRANCE
NO SCALE

STATE OF MARYLAND — PROFESSIONAL ENGINEER

SUBDIVISION NAME "OWEN BROWN WOODS"			SECT / AREA 1 / 2			LOT / PARCEL LOTS 27-64	
PLAT OR L/F 7441, 7442, 7443	BLOCK B	ZONE R-20	TAX MAP 36	GRID 5	ELEC. DIST	CENSUS TR 6053.02	
WATER CODE E-28			SEWER CODE 5324400, 5325500				

WATER & SEWER CONTRACT NO. 24-1571-D

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS HOWARD COUNTY MARYLAND

_____ 3-31-88
COUNTY HEALTH OFFICER DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING

_____ 4.6.88
DIRECTOR DATE

_____ 4/4/88
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT DATE

APPROVED FOR PUBLIC WATER & PUBLIC SEWERAGE SYSTEMS & P PUBLIC ROADS HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

_____ 3-22-88
DIRECTOR DATE

_____ 3-29-88
CHIEF, BUREAU OF ENGINEERING DATE

SHANABERGER & LANE
8726 TOWN AND COUNTRY BLVD
SUITE 203
ELLICOTT CITY, MD 21043
(301) 461-9563

DESIGNED	GSS
DRAWN	CPK
CHECKED	GSS
DATE	3/1/88

OWNER (JERS, INC.
ROSLYN N GOLDBERG
8609 KELLER AVE.
STEVENSON, MD 21153
(301) 486-6390

DIVISION C...
DATE 1-14-88
LKS

REVISIONS			
NO	DATE	DESCRIPTION	BY
1	3-19-92	HOUSES ON LOTS 31 & 35	SAS
2	10-2-92	HOUSE ON LOT 42	SAS
3	4-20-93	GRADING LOT 42	SAS
4	8-10-93	HOUSE ON LOT 35	SAS
5	10-14-93	MOVE HOUSE LOT 35, ADD 3RD GAR. BAY, REV GRADING	SAS

SITE DEVELOPMENT PLAN
SECTION ONE, AREA TWO
OWEN BROWN WOODS, LOTS 27-66
5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
PLAT NO 7441-7443, TAX MAP 36, PARCEL 113
36 SINGLE FAMILY DETACHED UNITS

SCALE 1" = 30'
SHEET 1 OF 5
DATE 12-8-87

SDP-88-120

...ME ...WN WOODS			SECT / AREA 1 / 2		LOT / PARCEL LOTS 27-64
PLAT or L/F 7441, 7442, 7443	BLOCK 8	ZONE R-20	TAX MAP 36	ELEC DIST 5	CENSUS TR 6053.02
WATER CODE E-28			SEWER CODE 5324400, 5325500		

I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE MUST PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION.

DATE

"I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS AS DEEMED NECESSARY.

Roslynn Goldberg 2-22-88
DATE

№	REVISION	Date
1	Revise house and grade lot 55 add house typical by Clark Finefrock & Sackett, Inc	5 12 92
2	Revise house and grade lot 59 add house typical by Morris, Ritchie & Associates	5-3-94
3	Revise house and grade on lot 62 - add typical house - Sedghi & Associates, Ltd	7-8-94
4	Revise house & grading on lot 60 - add typical house Shanaberger & Lane	10-18-94
5	Revise house & grading on lot 54 - add typical house - Mike Sedghi	10-20-95
6	Revise hse, lot 61, Show Field Run Ex Topo Add hse typical by Clark · Finefrock & Sackett, Inc	3 4 96
7	Rev house lot 57, revise grading lot 57, Shanaberger & Lane	3-18-96

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS HOWARD COUNTY MARYLAND

COUNTY HEALTH OFFICER 3-31-88 DATE

APPROVED HOWARD COUNTY OFFICE OF PLANNING & ZONING

DIRECTOR 4.6.88 DATE

CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT 4/4/88 DATE

APPROVED. FOR PUBLIC WATER & PUBLIC SEWERAGE SYSTEMS AND PUBLIC ROADS HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.

DIRECTOR 3/29/88 DATE

CHIEF, BUREAU OF ENGINEERING 3-28-88 DATE

SHANABERGER & LANE
8726 TOWN AND COUNTRY BLVD
SUITE 203
ELLICOTT CITY, MD 21043
(301) 461-9563

DESIGNED GGS
DRAWN CPK
CHECKED GGS
DATE 3/1/88

OWNER: JIERS, INC.
ROSLYNN GOLDBERG
8609 KELLER AVE
STEVENSON, MD 21153
(301) 486-6390

DIVISION ... HOWARD ...
DATE 1-14-88

SITE DEVELOPMENT PLAN
SECTION ONE, AREA TWO
OWEN BROWN WOODS, LOTS 27-66
5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
PLAT NO 7441-7443, TAX MAP 36, PARCEL 113
38 SINGLE FAMILY DETACHED UNITS

SCALE 1" = 30'
SHEET 2 OF 5
DATE 12-8-87

SDP-88-120

LOT LOCATION SHEET FOUR

LOT NO	STREET ADDRESS
46	6208 DEVON COURT
47	6212 " "
48	6205 " "
49	6201 " "
50	6125 WOODED RUN DRIVE
51	6129 " "
52	6135 " "
53	6139 " "
54	6145 " "
55	6105 SHADED LEAF COURT
56	6109 " "
57	6113 " "
58	6117 " "
59	6120 " "
60	6116 " "
61	6112 " "
62	6108 " "
63	6104 " "
64	6101 WOODED RUN DRIVE

GENERAL NOTES

1 ZONING - R-20
2 TOTAL AREA = 15.2322 AC
3 AREA OF LOTS = 38 LOTS = 12.9278 Ac
4 AREA OF ROADS = 2.0944 Ac
5 AREA OF OPEN SPACE
a) NO 100 YEAR FLOOD PLAIN
b) NET OPEN SPACE PROVIDED = 0.2181 Ac
c) OPEN SPACE HAS BEEN MET IN OVERALL SUBDIVISION
6 PROPERTY ON TAX MAP 36 PARCEL 13
7 PROPERTY ON SOILS MAP #24 PREDOMINANT SOILS BkB2, BrC2 & GIB2
8 MAX GRADE SLOPE 2:1
9 MIN GRADE SLOPE 2%
10 SEE SHEET 3 & 4 OF 4 FOR SEDIMENT CONTROL
11 TOTAL DISTURBED AREA =
12 BASED ON BOUNDARY & TOPOGRAPHIC SURVEY BY DEVELOPMENT CONSULTANTS GROUP, INC., DATED 12/1983
13 BENCHMARKS BM "A" NAIL IN UTILITY POLE #467720, ELEV 399.59
BM "B" + CUT IN RIM OF SEWER MANHOLE ELEV 399.53
14 SEE VP 84-139 & VP 85-59
15 LEGEND EXISTING CONTOURS 404
PROPOSED CONTOURS 404
PROPOSED LIMIT OF CLEARING & GRADING
(WOODS TO REMAIN)
16 NUMBER OF UNITS ON THIS PLAN 38
17 THE CONTRACTOR OR DEVELOPER SHALL CONTACT THE CONSTRUCTION INSPECTOR DIVISION 24 HRS IN ADVANCE OF COMMENCEMENT OF WORK, AT 992-2650

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS

US SOIL CONSERVATION SERVICE — DATE 3/23/88

THIS DEVELOPMENT PLAN IS APPROVED FOR FOR EROSION & SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION SERVICE.

HOWARD SOIL CONSERVATION DISTRICT — DATE 3-1-88

I CERTIFY THAT THE PLAN FOR POND CONSTRUCTION EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE SHALL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN AS-BUILT PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION

DATE 2-22-88

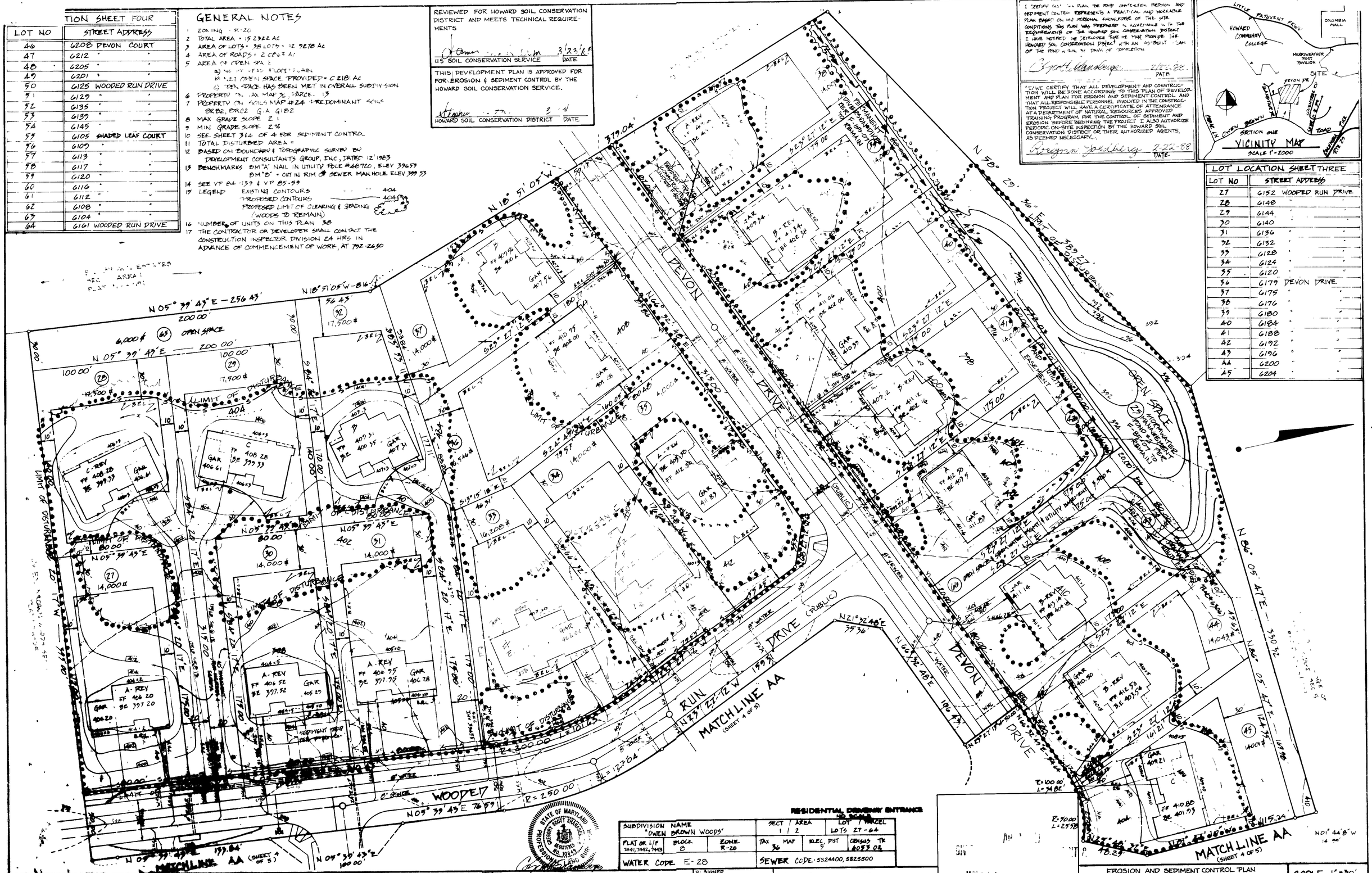
I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS DEEMED NECESSARY.

DATE 2-22-88

VICINITY MAP
SCALE 1" = 2000

LOT LOCATION SHEET THREE

LOT NO	STREET ADDRESS
27	6152 WOODED RUN DRIVE
28	6148 " "
29	6144 " "
30	6140 " "
31	6136 " "
32	6132 " "
33	6128 " "
34	6124 " "
35	6120 " "
36	6179 DEVON DRIVE
37	6175 " "
38	6176 " "
39	6180 " "
40	6184 " "
41	6188 " "
42	6192 " "
43	6196 " "
44	6200 " "
45	6204 " "



STATE OF MARYLAND — GORDON SCOTT SHANABERGER — REGISTERED NO. 10844 — PROFESSIONAL ENGINEER AND LAND SURVEYOR

SUBDIVISION NAME "OWEN BROWN WOODS"			SECT / AREA 1 / 2		LOT / PARCEL LOTS 27-64
PLAT OR L/F 7441, 7442, 7443	BLOCK B	ZONE R-20	TAX MAP 36	ELEC. DIST 5	CENSUS TR 6053.02
WATER CODE E-28			SEWER CODE 5524400, 5825500		

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS HOWARD COUNTY, MARYLAND.
COUNTY HEALTH OFFICER — DATE 3-21-88

APPROVED HOWARD COUNTY OFFICE OF PLANNING & ZONING.
DIRECTOR — DATE 4.6.88
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE 4/4/88

APPROVED FOR PUBLIC WATER & PUBLIC SEWERAGE SYSTEMS AND PUBLIC ROADS HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
DIRECTOR — DATE 3/28/88
CHIEF, BUREAU OF ENGINEERING — DATE 3-28-88

SHANABERGER & LANE
8726 TOWN AND COUNTRY BLV'D
SUITE 203
ELLICOTT CITY, MD 21043
(301) 461-9563

D. SIGNED GSS
DRAWN CPK
CHECKED GSS
DATE 3/1/88

OWNER JIERS, INC
ROSLYNN GOLDBERG
8609 KELLER AVE.
STEVENSON, MD 21153
(301) 486-6390

APPROVED — DATE 1-19-88
LKL/

EROSION AND SEDIMENT CONTROL PLAN
SECTION ONE, AREA TWO
OWEN BROWN WOODS, LOTS 27-66
5TH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND
PLAT NO 7441-7443, TAX MAP 36, PARCEL 113
38 SINGLE FAMILY DETACHED UNITS

SCALE 1"=30'
SHEET 3 OF 5
DATE 12-8-87

SDP-88-120

PLAT OR L/P	BLOCK	ZONE	SECT / AREA	LOT / PARCEL
7441, 7442, 7443	8	R-20	1 / 2	LOTS 27 - 64

TAX MAP	ELEC DIST	CENSUS TR
36	5	6053.02

WATER CODE: E-28 SEWER CODE: 5324400, 5325500

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS

U.S. SOIL CONSERVATION SERVICE 3/23/88 DATE

THIS DEVELOPMENT PLAN IS APPROVED FOR EROSION & SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION SERVICE.

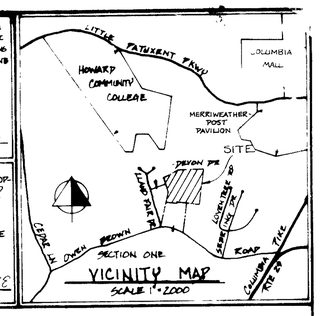
HOWARD SOIL CONSERVATION DISTRICT DATE

I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE MUST PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION

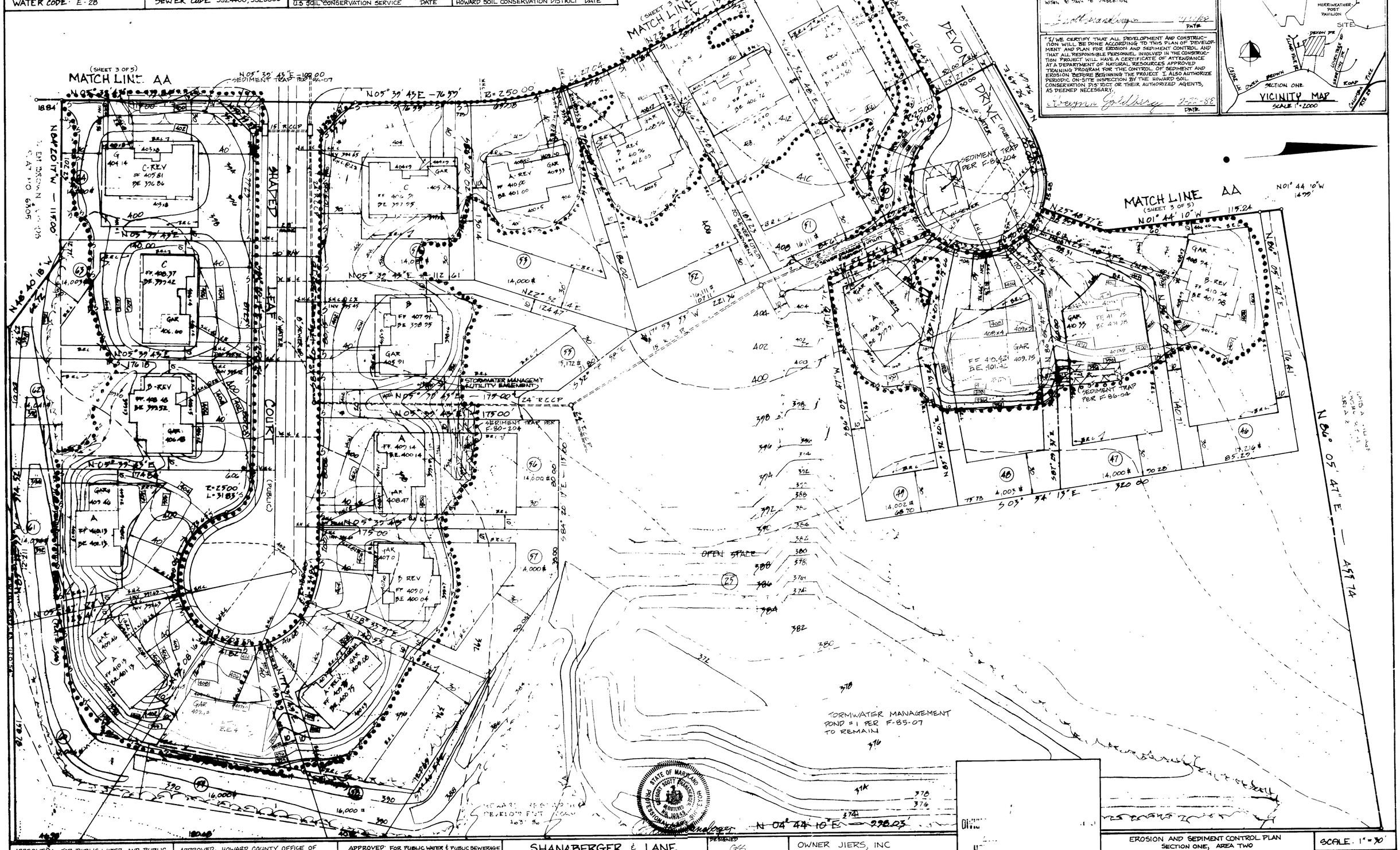
DATE

"I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS DEEMED NECESSARY.

Roslynn Goldberg 3-22-88 DATE



VICINITY MAP
SCALE 1" = 2000



APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS HOWARD COUNTY MARYLAND

COUNTY HEALTH OFFICER 3-31-88 DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING

DIRECTOR 4.6.88 DATE

CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT 4/4/88 DATE

APPROVED: FOR PUBLIC WATER & PUBLIC SEWERAGE SYSTEMS AND PUBLIC ROADS HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR 3/29/88 DATE

CHIEF, BUREAU OF ENGINEERING 3-28-88 DATE

SHANABERGER & LANE
8726 TOWN AND COUNTRY BLVD
SUITE 203
ELLICOTT CITY, MD 21043
(301) 461-9563

DESIGNED GSS
DRAWN CPK
CHECKED GSS
DATE 3/1/88

OWNER JIERS, INC
ROSLYNN GOLDBERG
8609 KELLER AVE
STEVENSON, MD 21153
(301) 486-6390

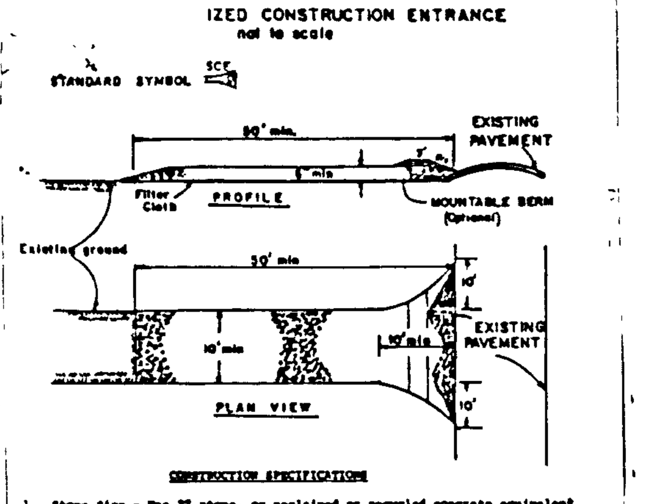
1-14-88

EROSION AND SEDIMENT CONTROL PLAN
SECTION ONE, AREA TWO
OWEN BROWN WOODS, LOTS 27-66
5TH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND
PLAT NO 7441-7443, TAX MAP 36, PARCEL 113
38 SINGLE FAMILY DETACHED UNITS

SCALE 1" = 30'
SHEET 4 OF 5
DATE 12-8-87

SDP-88-120

STABILIZED CONSTRUCTION ENTRANCE
not to scale

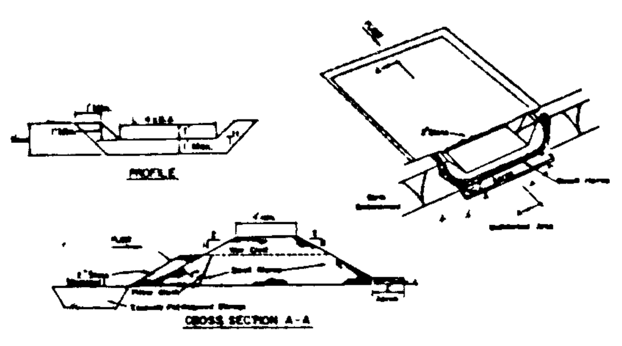


CONSTRUCTION SPECIFICATIONS

1. Stone Size - Use 2" stone, or reclaimed or recycled concrete equivalent.
2. Length - As required, but not less than 50 feet (except on a single residence lot where a 30 foot minimum length would apply).
3. Thickness - Not less than six (6) inches.
4. Width - Ten (10) foot minimum, but not less than the full width at points where ingress or egress occurs.
5. Filter Cloth - Will be placed over the entire area prior to placing of stone. Filter will not be required on a single family residence lot.
6. Surface Water - All surface water flowing or diverted toward construction entrances shall be piped across the entrance. If piping is impractical, a mountable berm with 5:1 slopes will be permitted.
7. Maintenance - The entrance shall be maintained in a condition which will prevent tracking or flowing of sediment onto public rights-of-way. This may require periodic top dressing with additional stone as conditions demand and repair and/or cleanout of any measures used to trap sediment. All sediment spilled, dropped, washed or tracked onto public rights-of-way must be removed immediately.
8. Washing - Wheels shall be cleaned to remove sediment prior to entrance onto public rights-of-way. When washing is required, it shall be done on an area stabilized with stone and which drains into an approved sediment trapping device.
9. Periodic inspection and needed maintenance shall be provided after each rain.

U. S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE College Park, Md.	STABILIZED CONSTRUCTION ENTRANCE	Standard Drawing SCE-1

STONE OUTLET SEDIMENT TRAP ST-V



OPTION: A one foot layer of 2" stone may be placed on the upstream side of the riprap in place of the embedded filter cloth.

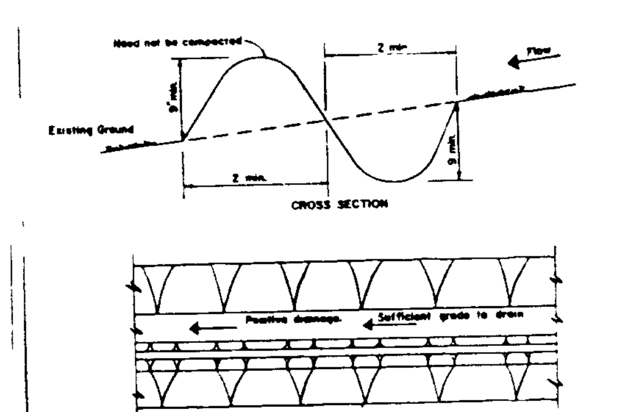
CONSTRUCTION SPECIFICATIONS FOR ST-V

1. Area under embankment shall be cleared, grubbed and stripped of any vegetation and root mat. The pool area shall be cleared.
2. The fill material for the embankment shall be free of roots and other woody vegetation as well as over-sized stones, rocks, organic material or other objectionable material. The embankment shall be compacted by traversing with equipment while it is being constructed.
3. All cut and fill slopes shall be 2:1 or flatter.
4. The stone used in the outlet shall be small riprap 4"-6" along with a 1' thickness of 2" aggregate placed on the upgrade side on the small riprap or embedded filter cloth in the riprap.
5. Sediment shall be removed and trap restored to the original dimensions when the sediment has accumulated to ½ the design depth of the trap.
6. The structure shall be inspected after each rain and repairs made as needed.
7. Construction operations shall be carried out in such a manner that erosion and water pollution is minimized.
8. The structure shall be removed and the area stabilized when the drainage area has been properly stabilized.

Maximum Drainage Area. 5 Acres

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE COLLEGE PARK, MARYLAND	STONE OUTLET SEDIMENT TRAP	STANDARD DRAWING ST-V

PERIMETER DIKE/SWALE
not to scale



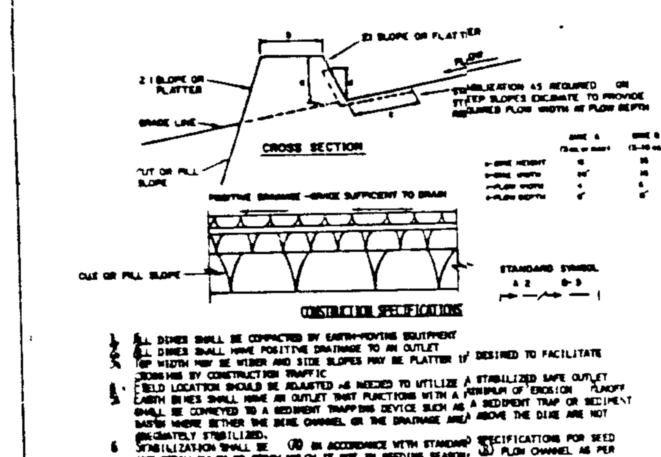
CONSTRUCTION SPECIFICATIONS

1. All perimeter dike/swale shall have uninterrupted positive grade to an outlet
2. Diverted runoff from a disturbed area shall be conveyed to a sediment trapping device
3. Diverted runoff from an undisturbed area shall outlet into an undisturbed stabilized area at non-erosion velocity
4. The swale shall be excavated or shaped to line, grade, and cross section as required to meet the criteria specified in the standard
5. Stabilization of the area disturbed by the dike and swale shall be done in accordance with the standard and specification for seed and straw mulch, and shall be done within 30 days.
6. Periodic inspection and required maintenance must be provided after each rain event

Max. Drainage Area Limit: 2 Acres

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE COLLEGE PARK, MARYLAND	PERIMETER DIKE/SWALE	Standard Drawing PDS-1

EARTH DIKE



CONSTRUCTION SPECIFICATIONS

1. All dikes shall be compacted by earth-moving equipment
2. All dikes shall have positive drainage to an outlet
3. Top width may be wider and side slopes may be flatter if desired to facilitate crossing by construction traffic
4. Field location should be adjusted as needed to utilize a stabilized safe outlet
5. Earth dikes shall have an outlet that functions with a minimum of erosion. Runoff shall be conveyed to a sediment trapping device such as a sediment trap or sediment basin where either the dike channel or the drainage area above the dike are not adequately stabilized.
6. Stabilization shall be (A) in accordance with standard specifications for seed and straw mulch or straw mulch if not in seeding season. (B) flow channel as per the chart below.

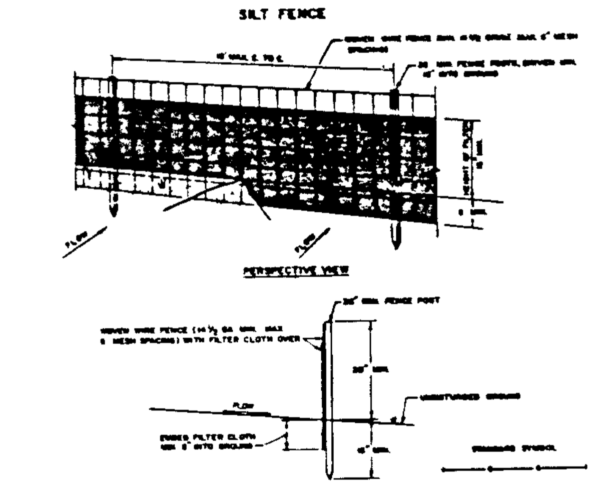
FLOW CHANNEL STABILIZATION

TYPE OF TREATMENT	CHANNEL GRADE	DIKE A	DIKE B
1	.5-3.0%	Seed and Straw Mulch	Seed and Straw Mulch
2	3.1-5.0%	Seed and Straw Mulch	Seed using Jute, or Excelsior; Sod; 2" Stone
3	5.1-8.0%	Seed with Jute, or Sod; 2" Stone	Lined Rip-Rap 4-8"
4	8.1-20%	Lined Rip-Rap 4-8"	Engineering Design

A. Stone to be 2 inch stone, or recycled concrete equivalent, in a layer at least 3 inches in thickness and be pressed into the soil with construction equipment.
B. Rip-rap to be 4-8 inches in a layer at least 8 inches thick and pressed into the soil.
C. Approved equivalents can be substituted for any of the above materials.
7. Periodic inspection and required maintenance must be provided after each rain event.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE COLLEGE PARK, MARYLAND	EARTH DIKE	STANDARD DRAWING ED-1

SILT FENCE



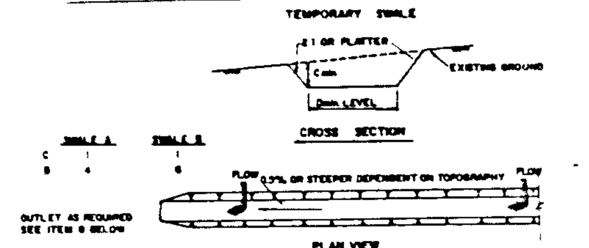
CONSTRUCTION NOTES FOR FABRICATED SILT FENCE

1. Woven wire fence to be fastened securely to fence posts with wire ties or staples
2. Filter cloth to be fastened securely to woven wire fence with ties spaced every 24" at top and mid section
3. When two sections of filter cloth adjoin each other they shall be overlapped by six inches and folded
4. Maintenance shall be performed as needed and material removed when "bulges" develop in the silt fence

POSTS: Steel either T or U type or 2" hardwood
FENCE: Woven wire, 14 Ga. 6" max. mesh opening
FILTER CLOTH: Filter X, Mirafi 100X, Stabilinka T140N or approved equal.
PREFABRICATED UNIT: Geofab, Envirofence, or approved equal.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE COLLEGE PARK, MARYLAND	SILT FENCE	STANDARD DRAWING SF-1

TEMPORARY SWALE



CONSTRUCTION SPECIFICATIONS

1. All temporary swales shall have uninterrupted positive grade to an outlet
2. Diverted runoff from a disturbed area shall be conveyed to a sediment trapping device
3. Diverted runoff from an undisturbed area shall outlet directly into an undisturbed stabilized area at non-erosive velocity
4. All trees, brush, stumps, obstructions and other objectionable material shall be removed and disposed of so as not to interfere with the proper functioning of the swale
5. The swale shall be excavated or shaped to line, grade, and cross section as required to meet the criteria specified herein and be free of bank projections or other irregularities which will impede normal flow
6. Fills shall be compacted by earth moving equipment
7. All earth removed and not needed on construction shall be placed so that it will not interfere with the functioning of the swale
8. Stabilization shall be as per the chart below

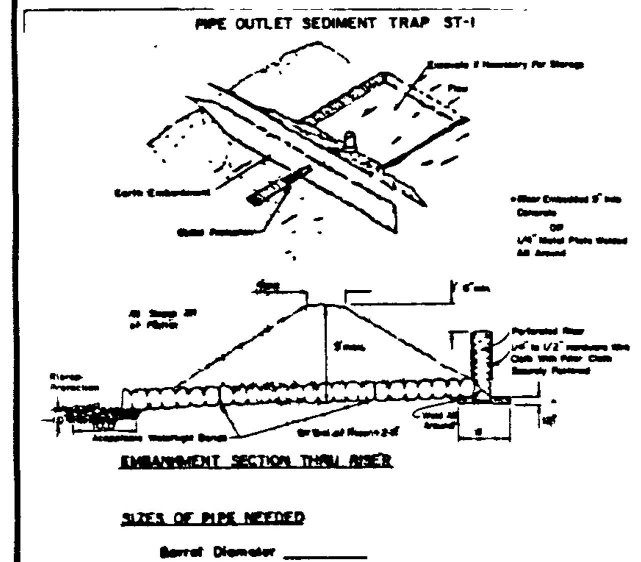
FLOW CHANNEL STABILIZATION

TYPE OF TREATMENT	CHANNEL GRADE	A (5 ac or less)	B (5 ac - 10 ac)
1	0.5-3.0%	Seed and Straw Mulch	Seed and Straw Mulch
2	3.1-5.0%	Seed and Straw Mulch	Seed using Jute or Excelsior
3	5.1-8.0%	Seed with Jute or Excelsior; Sod	Lined Rip-Rap 4-8" Recycled Concrete Equivalent
4	8.1-20%	Lined 4-8" Rip-Rap	Engineered Design

9. Periodic inspection and required maintenance must be provided after each rain event

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE COLLEGE PARK, MARYLAND	TEMPORARY SWALE	STANDARD DRAWING TS-1

PIPE OUTLET SEDIMENT TRAP ST-I



SIZES OF PIPE NEEDED

Barrel Diameter ________

Riser Diameter ________

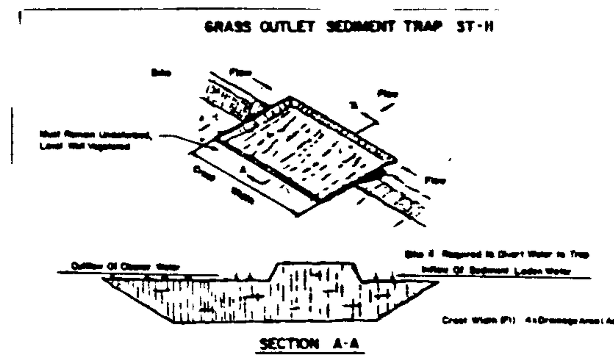
Note:

For Construction Specification see sheet 16.08

Max Drainage Area 5 Acres

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE COLLEGE PARK, MARYLAND	PIPE OUTLET SEDIMENT TRAP	STANDARD DRAWING ST-I

GRASS OUTLET SEDIMENT TRAP ST-II



EXCAVATED GRASS OUTLET SEDIMENT TRAP

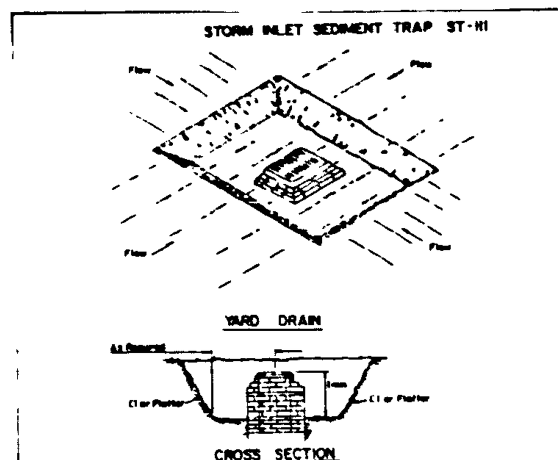
CONSTRUCTION SPECIFICATION FOR ST-II

1. Volume of sediment storage shall be 1800 cubic feet per acre of contributory drainage area
2. Minimum crest width shall be 4 X Drainage Area
3. Sediment shall be removed and trap restored to its original dimensions when the sediment has accumulated to ½ the design depth of the trap. Removed sediment shall be deposited in a suitable area and in such a manner that it will not erode
4. The structure shall be inspected after each rain and repairs made as needed.
5. Construction operations shall be carried out in such a manner that erosion and water pollution shall be minimized.
6. The sediment trap shall be removed and area stabilized when the remaining drainage area has been properly stabilized
7. All cut slopes shall be 1:1 or flatter.

Maximum Drainage Area. 5 Acres

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	GRASS OUTLET SEDIMENT TRAP	STANDARD DRAWING ST-II

STORM INLET SEDIMENT TRAP ST-III



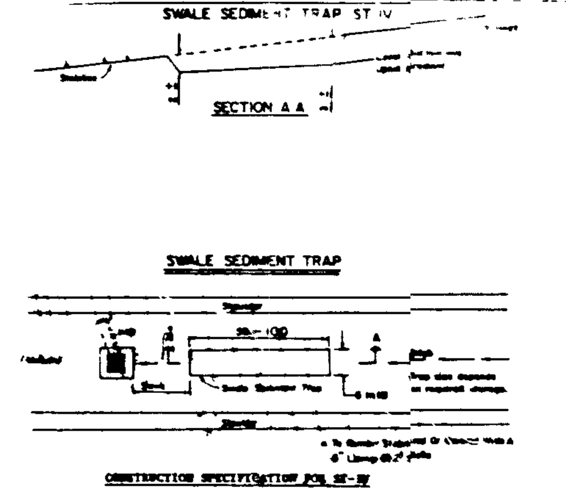
CONSTRUCTION SPECIFICATION FOR ST-III

1. Sediment shall be removed and the trap restored to its original dimensions when the sediment has accumulated to ½ the design depth of the trap. Removed sediment shall be deposited in a suitable area and in such a manner that it will not erode
2. The volume of sediment storage shall be 1800 cubic feet per acre of contributory drainage
3. The structure shall be inspected after each rain and repairs made as needed.
4. Construction operations shall be carried out in such a manner that erosion and water pollution shall be minimized
5. The sediment trap shall be removed and the area stabilized when the contributory drainage area has been properly stabilized
6. All cut slopes shall be 1:1 or flatter

Maximum Drainage Area 3 Acres

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE COLLEGE PARK, MARYLAND	STORM INLET SEDIMENT TRAP	STANDARD DRAWING ST-III

SWALE SEDIMENT TRAP ST-IV



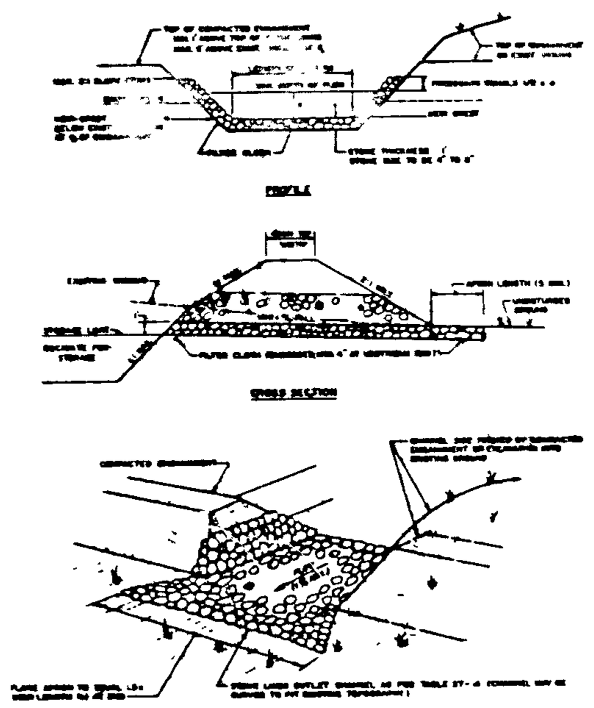
CONSTRUCTION SPECIFICATION FOR ST-IV

1. The swale sediment trap shall be constructed in accordance with the dimensions provided on the design drawings or sized to provide the minimum storage necessary 1800 cubic feet of storage for each acre of drainage area.
2. Sediment shall be removed and trap restored to its original dimensions when the sediment has accumulated to ½ the design depth of the trap. Removed sediment shall be deposited in a suitable area and in such a manner that it will not erode.
3. The structure shall be inspected after each rain and repairs made as needed.
4. Construction operations shall be carried out in such a manner that erosion and water pollution shall be minimized.
5. The sediment trap shall be removed and area stabilized when the contributory drainage area has been properly stabilized.
6. The swale sediment trap will be properly backfilled and the swale or ditch reconstructed.

Maximum Drainage Area: 2 Acres

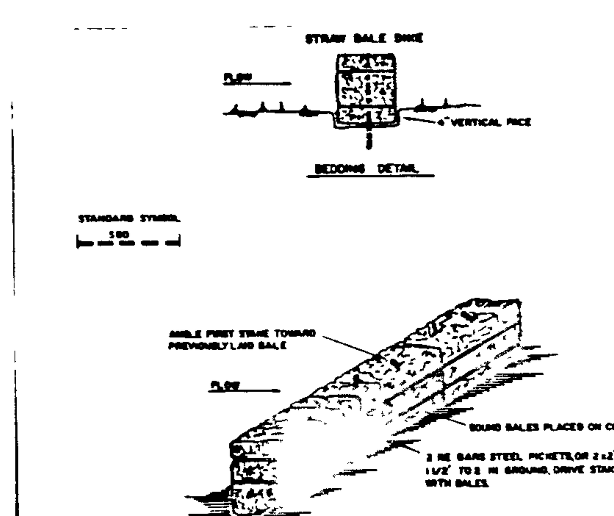
U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE COLLEGE PARK, MARYLAND	SWALE SEDIMENT TRAP	STANDARD DRAWING ST-IV

RIPRAP OUTLET SEDIMENT TRAP ST-VI



U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE COLLEGE PARK, MARYLAND	RIPRAP OUTLET SEDIMENT TRAP	STANDARD DRAWING ST-VI

STRAW BALE DIKE



CONSTRUCTION SPECIFICATIONS

1. Bales shall be placed at the toe of a slope or on the contour and in a row with ends tightly abutting the adjacent bales.
2. Each bale shall be embedded in the soil a minimum of (4) inches, and placed so the bindings are horizontal.
3. Bales shall be securely anchored in place by either two stakes or re-bars driven through the bale. The first stake in each bale shall be driven toward the previously laid bale at an angle to force the bales together. Stakes shall be driven flush with the bale.
4. Inspection shall be frequent and repair replacement shall be made promptly as needed.
5. Bales shall be removed when they have served their usefulness so as not to block or impede storm flow or drainage.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE COLLEGE PARK, MARYLAND	STRAW BALE DIKE	STANDARD DRAWING SBD-1

SEDIMENT CONTROL NOTES

1) A minimum of 24 hours notice must be given to the Howard County Office of Inspection and Permits prior to the start of any construction. (992-2437)
2) All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
3) Following initial soil disturbance or redisturbance, permanent or temporary stabilization shall be completed within: a) 7 calendar days for all perimeter sediment control structures, dikes, perimeter slopes and all slopes greater than 3:1, b) 14 days as to all other disturbed or graded areas on the project site.
4) All sediment traps/basins shown must be fenced and warning signs posted around their perimeter in accordance with Vol. 1, Chaper 12, of the HOWARD COUNTY DESIGN MANUAL, Storm Drainage.
5) All disturbed areas must be stabilized within the time period specified above in accordance with the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seedings (Sec. 51) sod (Sec. 54), temporary seeding (Sec. 50) and mulching (Sec. 52.) Temporary stabilization with mulch alone can only be done when recommended seeding dates do not allow for proper germination and establishment of grasses.
6) All sediment control structures are to remain in place and are to be maintained in operative condition until permission for their removal has been obtained from the Howard County Sediment Control Inspector
7) Site Analysis:
   - Total Area of Site 13.1459 Acres
   - Area Disturbed 8.63 Acres
   - Area to be roofed or paved 3.4894 Acres
   - Area to be vegetatively stabilized 5.1406 Acres
   - Total Cut ____ Cu. yds
   - Total Fill ____ Cu. yds
   - Offsite waste/borrow area location ________
8) Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.
9) Additional sediment control must be provided, if deemed necessary by the Howard County DPW sediment control inspector.
10) On all sites with disturbed areas in excess of 2 acres, approval of the inspection agency shall be requested upon completion of installation of perimeter erosion and sediment controls, but before proceeding with any other earth disturbance or grading. Other building or grading inspection approvals may not be authorized until this initial approval by the inspection agency is made.
11) If houses are to be constructed on an "As-Sold" basis, at random, Single Lot Sediment Control as shown below shall be implemented.
12) All pipes to be blocked at the end of each day (see detail below). N/A
13) The total amount of straw bale dikes/silt fence equals 5,131 L.F.

SEQUENCE OF CONSTRUCTION:

1. OBTAIN GRADING PERMIT, INSTALL SEDIMENT & EROSION CONTROL DEVICES AND STABILIZE.
2. E[illegible] SEDIMENT TRAPS USED FOR ROAD GRADING (PER F-[illegible]4) ARE TO BE REMOVED AFTER ALL GRADED AREAS SHOWN ON F-86-04 ARE STABILIZED, AND AFTER PERMISSION HAS BEEN OBTAINED FROM THE SEDIMENT CONTROL INSPECTOR
3. EXCAVATE FOR FOUNDATION & ROUGH GRADE.
4. CONSTRUCT STRUCTURES [illegible] & DRIVEWAY.
5. FINAL GRADE & STAB[illegible] IN ACCORDANCE WITH STANDARDS & SPEC.'S
6. UPON APPROVAL OF SEDIMENT CONTROL INSPECTOR & H.S.C.D., REMOVE SEDIMENT & EROSION CONTROLS AND STABILIZE.

PERMANENT SEEDING NOTES

Apply to graded or cleared areas not subject to immediate further disturbance where a permanent long-lived vegetative cover is needed.

Seedbed Preparation: Loosen upper three inches of soil by raking, discing or other acceptable means before seeding, if not previously loosened

Soil Amendments: In lieu of soil test recommendations, use one of the following schedules:

1) Preferred - Apply 2 tons per acre dolomitic limestone (92 lbs/1000 square ft) and 600 lbs per acre 10-10-10 fertilizer (14 lbs/1000 sq ft) before seeding. Harrow or disc into upper three inches of soil. At time of seeding, apply 400 lbs per acre 30-0-0 ureaform fertilizer (9 lbs/1000 sq ft).
2) Acceptable - Apply 2 tons per acre dolomitic limestone (92 lbs/1000 sq ft) and 1000 lbs per acre 10-10-10 fertilizer (23 lbs/1000 sq ft) before seeding. Harrow or disc into upper three inches of soil.

Seeding - For the periods March 1 thru April 30, and August 1 thru October 15, seed with 60 lbs per acre (1.4 lbs/1000 sq ft) of Kentucky 31 Tall Fescue. For the period May 1 thru July 31, seed with 60 lbs Kentucky 31 Tall Fescue per acre and 2 lbs per acre (.05 lbs/1000 sq ft) of weeping lovegrass. During the period of October 16 thru February 28, protect site by: Option (1) 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring. Option (2) Use sod. Option (3) Seed with 60 lbs/acre Kentucky 31 Tall Fescue and mulch with 2 tons/acre well anchored straw.

Mulching - Apply 1½ to 2 tons per acre (70 to 90 lbs/1000 sq ft) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gallons per acre (5 gal/1000 sq ft) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 348 gallons per acre (8 gal/1000 sq ft) for anchoring.

Maintenance - Inspect all seeded areas and make needed repairs, replacements and reseedings.

TEMPORARY SEEDING NOTES

Apply to graded or cleared areas likely to be redisturbed where a short-term vegetative cover is needed.

Seedbed Preparation: Loosen upper three inches of soil by raking, discing or other acceptable means before seeding, if not previously loosened

Soil Amendments: Apply 600 lbs per acre 10-10-10 fertilizer (14 lbs/1000 sq ft)

Seeding: For periods March 1 thru April 30 and from August 15 thru November 15, seed with 2½ bushel per acre of annual rye (3.2 lbs/1000 sq ft). For the period May 1 thru August 14, seed with 3 lbs per acre of weeping lovegrass (.07 lbs/1000 sq ft). For the period November 16 thru February 28, protect site by applying 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring, or use sod.

Mulching: Apply 1½ to 2 tons per acre (70 to 90 lbs/1000 sq ft) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gal per acre (5 gal/1000 sq ft) of emulsified asphalt on flat areas. On slopes, 8 ft or higher, use 348 gal per acre (8 gal/1000 sq ft) for anchoring.

Refer to the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for rate and methods not covered.

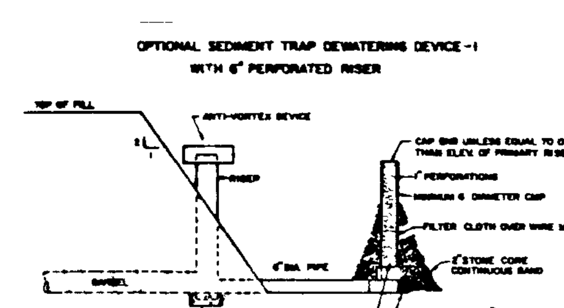
REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS

[signature] 3/23/88
US SOIL CONSERVATION SERVICE DATE

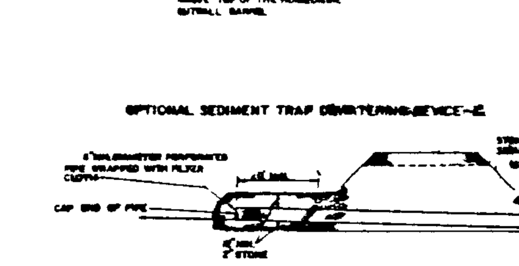
THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION & SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION SERVICE

[signature] 3/23/88
HOWARD SOIL CONSERVATION DISTRICT DATE

OPTIONAL SEDIMENT TRAP DEWATERING DEVICE-I
WITH 6" PERFORATED RISER

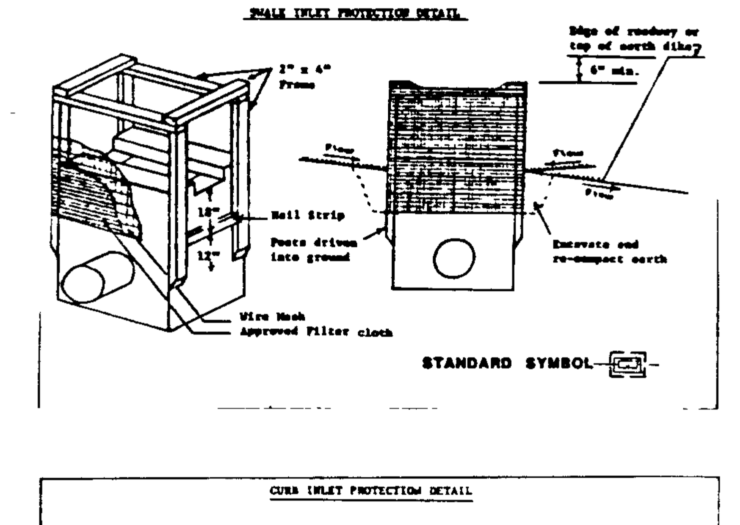


OPTIONAL SEDIMENT TRAP DEWATERING DEVICE-II

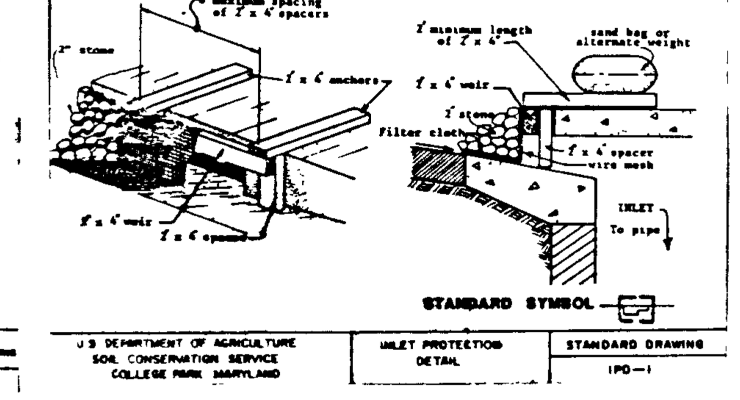


U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE COLLEGE PARK, MARYLAND	OPTIONAL SEDIMENT TRAP DEWATERING DEVICES	STANDARD DRAWING ST

SWALE INLET PROTECTION DETAIL



CURB INLET PROTECTION DETAIL



U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE COLLEGE PARK MARYLAND	INLET PROTECTION DETAIL	STANDARD DRAWING IPD-1

DIVIS[illegible]

1-14-88

LRS/

CONSULTANT'S CERTIFICATION

"I certify that this plan of erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site, and that this plan was prepared in accordance with the requirements of the ____________ County Soil Conservation District and "Standards and Specifications for Soil Erosion and Sediment Control." I have reviewed this erosion and sediment control plan with the owner/developer."

Signature: [signature] Md. License No. ________ Date ________

Name: ____________

STATE OF MARYLAND — GREGORY SCOTT SHANABERGER — REGISTERED NO. 10849 — PROFESSIONAL LAND SURVEYOR

OWNERS/DEVELOPERS CERTIFICATION

"I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL AND AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY"

[signature] ____________ Date
Owner/Developer (Name and Title)

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS HOWARD COUNTY, MARYLAND

[signature] M.D. 3-31-88
COUNTY HEALTH OFFICER DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING

[signature] 4.6.88
DIRECTOR DATE

[signature] 4/4/88
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT DATE

APPROVED FOR PUBLIC WATER & PUBLIC SEWERAGE SYSTEMS AND PUBLIC ROADS HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.

[signature] DATE
DIRECTOR

[signature] 3 28 88
CHIEF, BUREAU OF ENGINEERING DATE

SHANABERGER & LANE
8726 TOWN AND COUNTRY BLVD.
SUITE 203
ELLICOTT CITY, MD 21043
(301) 461-9563

DESIGNED	GSS
DRAWN	CPK
CHECKED	GSS
DATE	3/1/88

OWNER & DEVELOPER

JIERS, INC
ROSLYNN GOLDBERG
8609 KELLER AVE
STEVENSON, MD 21153
(301) 486-6390

GRADING AND SEDIMENT CONTROL NOTES & DETAILS

OWEN BROWN WOODS LOTS 27-66

TAX MAP 36 PARCEL 113, PARCELS ——
ZONING MAP 36, 5th ELECTION DISTRICT
HOWARD COUNTY, MARYLAND, 12-8-87
DATE

SCALE: N/A

SHEET 5 OF 5

SDP-88-120